

ICT for Education in Djibouti



Source: CIA World Factbook¹

Overview

Djibouti's economy is based on service activities connected with the country's strategic location and its status as a free trade zone in northeast Africa. Boasting of a digital telecommunication network and connected to the rest of the world through undersea optical fiber, the country make its neighbours envious. Two thirds of the population is urban where ICT services are readily available. The country has a more than cordial relationship with most of the western donors. All these factors work for Djibouti's efforts into modernising their education sector.

With a reform programme that is on-going, most of the focus has been laid on developing and improving the physical infrastructure and other non-ICT resources including building new classrooms and providing text books. At higher education focus has been on providing skilled teachers and encouraging out-of-school youths to get vocational training. ICT has only been factored in through the National ICT Policy, which was developed by the ministry of communication. Djibouti needs a sector specific policy for the adoption of ICT in the Education Sector, together with an implementation plan that will take advantage of the available enablers including the good telecommunication network.

Introduction

Djibouti is strategically located on the northeast coast of the Horn of Africa. It lies to the east and separates the Red Sea from the Gulf of Aden. Small in size, Djibouti is bordered by Eritrea to the north, Ethiopia to the west and southwest, and Somalia to the south. The country is one of the newest in Africa having gained independence from the French in 1977 and changed from the French Somaliland to Djibouti.

Djibouti covers a landmass of 23,000 sq km with a 370 km long coast line. The economy is based on service activities connected with the country's strategic location and status as a free trade zone in northeast Africa. Two-thirds of the inhabitants live in the capital city; the remainder are mostly nomadic herders. Scanty rainfall limits crop production to fruits and vegetables, and most food must be imported. Djibouti provides services as both a transit port for the region and an international transshipment and refuelling center.

Table 1: Selected Country Statistics^{1,2}

Population	779,000
Languages	French, Arabic, Somali and Afar
GDP PPP	US\$ 1000 (Est 2005)
Human Development Index	Position 148 out of 177
Human Poverty Index	52 out of 102
Expenditure on Education (% of GDP)	20.5 %

The education sector is a priority for the Djiboutian government, accounting for 20.5% of its budget. The policy for the education system and its plan of action for the period 2006-2008 comply with two targets of the MDGs: To ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling and that girls and boys will have equal access to all levels of education.

Table 2: Selected Education Statistics

Net Primary Enrolment	39% (2004)
Net Secondary Enrolment	22% (2004)
Gross Tertiary Enrolment	2% (2004)
Adult Literacy	67.9%

Education Policy

The Djibouti educational system was originally developed to meet a limited demand for education. Essentially elitist in its design and borrowing heavily from the French system, the system stood isolated from its environment and was not adapted to the country's realities. Efforts deployed during the 90s have resulted in an increase in enrollment, but

are still below what is needed to meet people's expectations and the needs of a developing nation.

In 1999, the government revisited its educational policies and launched a consultative process that included all players (administration, teachers, parents, national assembly, and NGOs). The process led to a wide consensus regarding the sources of the problems and recommendations for the policies needed to address them. Building on the consensus and the recommendations that followed, the government developed a ten-year master plan for education (2000–10). In August 2000, it passed an education planning act and prepared a medium-term plan of action (2000–05).³

The planning act represents a considerable departure from the old system. A restructured fundamental education system comprised of nine years (five years of primary education followed by four years of middle school) is now mandatory. Entry in the secondary educational system of three years requires a Certificate of Fundamental Education. The Act has also introduced secondary level vocational education and has established university facilities in Djibouti.

Since the medium-term development plan and the planning act were implemented, noticeable progress has been achieved at all levels of education, thanks to the mobilization of external and internal resources for the financing of construction, equipment purchases, and teacher recruitment.

Government strategy covers basic education, vocational education, secondary education, higher education, adult education and, in particular, women's literacy. Specifically, every field of intervention focuses on five strategic objectives aimed at improving and strengthening access, equity, quality of education, institutional and managerial capabilities in order to pursue reforms, and partnerships.

There are 81 public primary schools in the country, 24 registered private primary schools, 12 secondary schools and 2 vocational schools. An estimated 73% of eligible primary school children don't go to school.^{4,5} Only 8% of first graders will eventually reach the 12th grade. Girls' enrollment is more than 10% lower than that of boys.

Teacher attrition is very high and new teachers are scarce. The local teacher training institute is unable to graduate more than 130 teachers per year. Textbooks are inadequate and there are not enough of them: on average, 20 primary school students will share a math textbook and 3 will share a French text. Several international agencies have come in to assist the Ministry of Education with its reform program which aims at improving access and the quality of education. Some of the organizations involved in the Djibouti education sector include USAID, UNICEF and the French government through the framework partnership between France and Djibouti.⁶

Current level and types of ICT infrastructure

Djibouti has an almost unique telecommunication network in Africa, with two earth stations, a landing point of three submarine cables linking Asia to the Middle East and Europe that gives it a key role as master station and as traffic node. However, the country has not benefited from these assets. Telecommunication traffic and revenues have remained lackluster for over a decade because of high tariffs and considerable delays in introducing new products.

The institutional and regulatory framework that governs this activity has not evolved either, in spite of major changes and transformations (liberalization, privatization, regulation) at the international level. Since ICTs are essential to the country's competitiveness and to its fight against poverty, the ministry of communication and culture, which is in charge of Posts and Telecommunications, conducted an ICT awareness campaign, beginning in May 2002. This resulted in a broad consensus and helped develop guidelines for a national policy on new technologies.^{7,8}

The main objectives of this sector are to:

- Increase access to the new information and communication technologies' services;
- Further reduce telecommunication costs in order to increase Djibouti's external competitiveness;
- Strengthen telecommunications' role as a regional integration factor; and
- Fight poverty and promote employment by developing activities linked to ICT.

The strategy was adopted by the council of ministers followed by the parliament. Its ten objectives are as follows:

- Universal access (means of access for all to ICTs)
- Increased capabilities in human and logistical resources, especially in the field of education and research
- Modernization of the state administrative apparatus
- Strengthening institutional, legal, and governance capabilities
- Increased use of ICT capabilities to help grow the private sector and create a regional hub
- Development of digital content as well as Djibouti's web presence
- Modernization and strengthening of the public health care system
- Management of the environment, disasters, famines and other ills, using ICT
- General motivational activities to strengthen the ICT sector – action plan
- Research development.

The ICT strategy and action plan with a 20-year horizon and an action plan of over 30 projects that can be considered to help transform the country while trying to deal with the fundamental issues of poverty, literacy and access to education and health services in general, community development (community access centers and community radio) and the challenge of transforming and modernizing the economy, government and society in general using ICTs.⁹

Table 3: Selected ICT Statistics

Telephone Lines	11,100 (2004)
Mobile Subscribers	34,500 (2004)
Internet Users	9000 (2005)
Internet Hosts	1540 (2006)
Television Stations	1
Radio Stations	FM 2, AM 1 (2001)

ICT in Education

Though ICT has been recognised as a critical tool in modernising the education sector in order to cater for the diverse human resource needs for the country, Djibouti is yet to develop a sector specific ICT for education Policy. In its sectoral strategies for the Poverty Reduction Strategy, the country has committed to establishing a health and education network, improve the connectivity and build ICT training facilities at the University and implement a video conferencing system, strengthen the CISCO Academy and the SchoolNet project.³

The Ministry also has prioritised capacity building for teachers in the use of ICT through the National Education and ICT project and the automation of the ministry itself. There is movement from secondary school level to the national university. At the secondary school level some schools through donors and NGOs have managed to equip computer labs and connectivity provided by the telecom incumbent Djibouti Telecom.⁹

Major initiatives/projects currently underway

It is difficult to establish the exact number and the state of implementation of the various projects due to the scarcity of information on them. Communication with the respective Djibouti ministries was difficult from both Kenya and Tanzania.

Djibouti Assistance to Education Project (AIDE)

USAID Djibouti Assistance to Education Project, also known by its French name Project AIDE (*Assistance Internationale pour le Développement de l'Education*) is a three-year effort to improve student learning in Djibouti. The objective will be pursued through three separate but inter-locking sets of interventions linked directly to the three intermediate results of increased access to basic education, improved quality of teaching and learning, and increased opportunities for girls' education. The SchoolNet and Cisco Academy initiatives fall under this project.

Through this project USAID donated 40 computers, printers and UPSs to four schools in rural Djibouti. Djibouti Telecoms, a partner in the project and the national telecommunication service provider, deployed local area networks and provided internet connectivity to four schools.

http://www.usaid.gov/stories/djibouti/pc_dj_computers.html
<http://www.equip123.net/webarticles/anmviewer.asp?a=70&z=16>

AVU/AfDB Teacher Training

Djibouti is one of the beneficiaries of the AVU/ African Development Bank (AfDB)/NEPAD initiated a teacher education program that commenced in 2006. The program revolves around the use of ICTs both in and across the curriculum, with a particular focus on mathematics and science education. The use of ICTs across the teaching curriculum will greatly contribute to improving the quality and increase the number of teachers, through programs that are delivered utilizing flexible, Open, Distance and e- Learning methodologies at an affordable cost for diploma, undergraduate and graduate levels.

<http://www.avu.org/documents/Fact-Sheet.pdf>

Education Radio Programs

In order to increase access and quality of education, the National Education Production Information and Research Center or in French, *Centre de recherche d'information et de production de l'éducation nationale*, through its School Radio project develops educational content that is broadcast through Djibouti Radio once a week. These programs are mainly aired in French and cover secondary school subjects such as mathematics and science. Some of these programs are also targeted to out-of-school youths.

<http://www.google.co.ke/search?hl=en&q=djibouti%2C+cripen&btnG=Google+Search>

Identification and description of constraints re: the use of ICT

Factor	Enabling Features	Constraining Features
Policy Framework and Implementation Plans		Djibouti does not have an ICT for Education policy, all the ICT work and implementation currently is as a result of the National ICT Policy which is not sector specific and therefore generalistic. Most of the initiatives are adhoc and not guided by detailed policy with a SMART implementation plan.
Infrastructure and Access	Djibouti has a relative good telecommunication infrastructure including landing stations for submarine fiber optic cable and a couple earth stations.	Access to ICT in Djibouti is complicated by cost of access especially for bandwidth. Despite having one of the best telecoms network in the region, the cost of connectivity is very high and

		<p>therefore of reach of many in the society including schools and educational institutions.</p> <p>There is only one telecommunications service provider, Djibouti Telecom, thereby creating a monopolistic market for fixed lines, mobile and internet.</p>
Urban Population	Djibouti is one of very few countries in Africa where almost 70% of its population is urban. With most of the ICT services and supplies being concentrated in the urban areas, this can work as a major enabler for increase use of ICT in the education sector	
Gender Equity	Te Government its development partners have consciously put in place strategies to increase access by girls and women to quality education. The USAID in 2005 provided support to expand opportunities for girls' education by providing incentives to schools for promoting girls' participation and by supporting and expanding existing literacy centers in targeted areas as well as fund information, education and communication programs focused on girls' adolescent health and social concerns. ¹¹	
Resources to invest in ICT		Despite having an urban population and a good telecommunication network, Djibouti is one of the poorest countries of the world. This therefore, means resources in the education sector are focussed in construction of new classrooms, textbooks and teacher training. ICT has to compete with these very visible and fundable priorities.
Skills and Capacity to utilise ICT		Like in many other countries in Africa, ICT skills are low, and especially so in the education sector where there is scarcity of teachers leave alone ICT teachers.

Donor Friendly	Djibouti is globally politically correct has good relations with most of the development partners from the west including the EU and the US. With a good ICT for Education policy in place, the country can easily get support to implement it.	
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Appendices

1 CIA World Factbook, Djibouti

<https://cia.gov/cia//publications/factbook/geos/dj.html>

2 UNESCO Institute of Statistics, Brief Statistics, Education in Djibouti

http://www.uis.unesco.org/profiles/EN/EDU/countryProfile_en.aspx?code=2620

3 International Monetary Fund, Djibouti Poverty Reduction Strategy Paper

<http://www.imf.org/external/pubs/ft/scr/2004/cr04152.pdf>

4 USAID Djibouti

http://djibouti.usembassy.gov/usaaid_in_djibouti.html

5 Encyclopaedia Britannica Online, Djibouti, Education

<http://www.britannica.com/eb/article-37642/Djibouti>

6 Framework Partnership Document between France and Djibouti

http://www.diplomatie.gouv.fr/en/article-imprim.php3?id_article=8487

7 Stratégie et plan d'action des TIC (ICT Strategy Implémentation Plan)

<http://www.mccpt.dj/strategie.doc>

8 UNECA, NICI Policies and Plans, Country Pages, Djibouti

<http://www.uneca.org/aisi/nici/Djibouti/djibouti.htm>

9 Richard Labelle, Consultant, ICTs for development, UNDP, 28 May 2003 “Djibouti ICT strategy and action plan”

<http://www.hartford-hwp.com/archives/33/034.html>

10 Rural Djibouti enters Cyberspace

http://www.usaid.gov/stories/djibouti/pc_dj_computers.html

11 USAID, Djibouti, Basic Education Improved, Factsheet

<http://www.usaid.gov/policy/budget/cbj2006/afr/pdf/dj603-001.pdf>

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